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| 10/758,905 | 01/16/2004 | Shihong Lao | 15115.103001V | 7059 |
| Jonathan P. Osha OSHA & MAY L.L.P. Suite 2800 1221 McKinney Street Houston, TX 77010 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/758,905

Applicant(s)

LAO ET AL.

Examiner

BERNARD KRASNIC

Art Unit

2624

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-15 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-15 and 17-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850/8)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 8/07/2008 and 8/11/2008

DETAILED ACTION

Response to Arguments

1. The amendment filed 7/15/2008 have been entered and made of record.

2. The application has pending claim(s) 1-3, 5-15 and 17-26.

3. In response to the amendments filed on 7/15/2008:

The "Objections to the claims" have been entered and therefore the Examiner withdraws the objections to the claims.

4. The Applicant's arguments with respect to claims 1-3, 5-15 and 17-26 have been considered but are moot in view of the new ground(s) of rejection because the Applicant has amended independent claim(s) 1, 13, and 23-26.

5. Applicant's arguments filed 7/15/2008 have been fully considered but they are not persuasive.

The Applicant alleges, "Claims 1-3 ..." in page 13 through "In view of above, Kojima, Center, and Soriano ..." in page 16, and states respectively that the prior art references Kojima, Center and Soriano whether taken separately or in combination fail to show or suggest the invention as recited in the amended independent claims because Kojima fails to show or suggest at least "a parameter selecting part for selecting a set of parameters from a table based on the attributes of a person inferred by the inference part and a result of recognition by the distance recognition part wherein

the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person" as required by the amended limitations in each of the independent claims. However the Examiner disagrees because Center discloses a parameter selecting part for selecting a set of parameters / skin color tones or templates from a table based on the attributes / information or characteristics or range of appearance of a person inferred by the inference part, wherein the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person {see paragraphs [0028] and [0047], Center teaches (for color analysis) a lookup table which is trained [optimal over the default table] for a particular person [regular user] having the parameters based on attributes of a person [skin color tones for the range of the persons appearance], Center also teaches (for template matching method) selecting the templates [parameters] from a number of templates [table] [optimal because Center tries to achieve the greater detection accuracy] tuned to recognize a particular person using the range of appearance or a particular user [parameters based on attributes of a particular person]]. Although Center doesn't explicitly suggest a distance recognition part and wherein the parameter selection is also influenced by the result of the recognition by the distance part, Kojima does suggest selecting a set of parameters / oblique and non-oblique hatching on range RA and R representing flesh tone from a table / LUT (look-up table) based on the attributes of a person / human face size [calculated from the zoom focal length and distance to object] inferred and a result of recognition / object distance L by the distance recognition part / calculate object distance L wherein the table / LUT (look-up table) stores /

memory (214) a plurality of sets of parameters / oblique and non-oblique hatching on range RA and R representing flesh tone that are respectively optimized [optimal because Kojima is trying to achieve greater face detection accuracy] based on each attribute of a person / human face size (see Kojima, col. 40 at lines 40-46, col. 41 at lines 3-5, col. 42 at line 53 through col. 43 at line 11, col. 44 at line 23 through col. 45 at line 17). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Center's device using Kojima's teachings by including the distance recognition part to Center's face image extraction part for improving the identification of a human face area (see Kojima, col. 42, lines 50-51). Therefore the current claims 1-3, 5-15 and 17-26 are still not in condition for allowance because they are still not patentably distinguishable over the prior art references.

Claim Objections

6. Claims 1, 23, and 25 are objected to because of the following informalities:

Claim 1 at line 10, claim 23 at line 11, claim 25 at line 9 respectively: "a person constituting an object" should be -- a person constituting the object -- in order to make the claim clear by referring to the same object as recited in the Applicant's amended claim limitation "a distance recognition part for recognizing a distance between an object and the image pickup unit" which is toward the beginning of the claim now.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 13-15, 17-22, 24, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claim 13 at lines 3-4 and lines 8-11: The claim limitation "identification information unique to the object" in line 11 is indefinite because it is unclear if the object is referring to the object of the claim limitation "a distance recognition part for recognizing a distance between an object and the image pickup unit" in lines 3-4 or the object of the claim limitation "predetermined number of objects" in line 9.

Re Claims 24 and 26 respectively: Similarly as just described for claim 13 above, claims 24 and 26 have the same 35 U.S.C. 112 2nd paragraph issues.

Claims 14-15 and 17-22 are dependent upon claim 13.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-3, 5-12, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Center (US 2002/0113862 A1, as applied in previous Office Action) in view of Kojima et al (US 5,638,136, as applied in previous Office Action).

Re Claim 1: Center discloses an image pickup device / videoconferencing system (see paragraph [0002], [0027], [0018], abstract) comprising an image pickup unit / camera including a lens / lens of camera and an image sensor / camera sensors such as zoom and focus sensors, and a control unit / computer system connected to camera for processing an image picked up by the image pickup unit and storing a processed image in one of an internal memory / memory of camera and computer system RAM or a predetermined storage medium (see Fig. 1, paragraphs [0018], [0003], and [0027], the computer is connected to the camera and they interact in real time since this is video conferencing), the control unit comprising a face image extraction part / locate face for extracting a face image contained in the image picked up by the image pickup unit (see Fig. 1, paragraphs [0018] and [0019]); an inference part / evaluate image quality for executing a process of inferring / evaluating attributes / information or characteristics of a person constituting an object based on feature amounts / color or motion analysis in an image area including the face image extracted (see paragraphs [0020], [0025], and [0004]); a parameter selecting part for selecting a set of parameters / skin color tones or templates from a table based on the attributes / information or characteristics or range of appearance of a person inferred by the inference part, wherein the table stores a

plurality of sets of parameters that are respectively optimized based on each attribute of a person {see paragraphs [0028] and [0047], Center teaches (for color analysis) a lookup table which is trained [optimal over the default table] for a particular person [regular user] having the parameters based on attributes of a person [skin color tones for the range of the persons appearance], Center also teaches (for template matching method) selecting the templates [parameters] from a number of templates [table] [optimal because Center tries to achieve the greater detection accuracy] tuned to recognize a particular person using the range of appearance or a particular user [parameters based on attributes of a particular person]]; an image pickup conditions adjusting part / adjust and control the camera for adjusting image pickup conditions / brightness, contrast and color balance based on the selected parameters by the parameter selecting part (see Fig. 1, paragraph [0020], [0028], [0047]); an information processing part / processing pass for storing in selected one of the memory and the storage medium / computer system RAM the image obtained / current frame or adjusted frame under the image pickup conditions adjusted by the image pickup conditions adjusting part (see paragraphs [0020], [0026], and [0027], the computer stores a current frame and does the evaluation of this information and then uses and produces an adjustment based on the evaluation and stores this adjustment frame).

Although Center is silent in teaching the storing of the selected parameters in one of an internal memory and a predetermined storage medium, it would have been obvious to one of ordinary skill in the art at the time the invention was made because

the selected templates need to be stored in the internal memory in order to be accessed and used later on for Centers face recognition tracking system.

However Center fails to disclose or fairly suggest a distance recognition part wherein the face image extraction part is influenced by the result of the recognition of the distance part and wherein the parameter selection is also influenced by the result of the recognition by the distance part.

Kojima discloses a distance recognition part / calculate object distance L for recognizing a distance / object distance L between an object / object and the image pickup unit / lens [see Kojima, Figs. 109, 110 and 113, col. 30, lines 37-39], wherein the face image extraction part / detection of human face area includes a part for specifying a size of the face image / detect width and size of a human face to be extracted, based on the result of recognition by the distance recognition part / based on the object distance L [see Kojima, Figs. 109, 110 and 113, col. 30, lines 37-39, col. 42, lines 53-65]; selecting a set of parameters / oblique and non-oblique hatching on range RA and R representing flesh tone from a table / LUT (look-up table) based on the attributes of a person / human face size [calculated from the zoom focal length and distance to object] inferred and a result of recognition / object distance L by the distance recognition part / calculate object distance L wherein the table / LUT (look-up table) stores / memory (214) a plurality of sets of parameters / oblique and non-oblique hatching on range RA and R representing flesh tone that are respectively optimized [optimal because Kojima is trying to achieve greater face detection accuracy] based on each attribute of a person

/ human face size (see Kojima, col. 40 at lines 40-46, col. 41 at lines 3-5, col. 42 at line 53 through col. 43 at line 11, col. 44 at line 23 through col. 45 at line 17).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Center's device using Kojima's teachings by including the distance recognition part to Center's face image extraction part for improving the identification of a human face area (see Kojima, col. 42, lines 50-51).

Re Claim 2: Center further discloses an inference part / evaluate image quality for executing the inference / evaluation of at least one of the race, age and sex as the attributes / range of appearance (see [0028], lines 4-9, [0048], the evaluation includes any combination of the template matching, motion detection, background differencing, and color analysis, in this case the template matching searches for a face using templates that represent the range of appearance of the different types of faces which are known as eigenfaces and these eigenfaces typically use race and sex).

Re Claim 3: Center further discloses wherein the information processing part / processing pass includes a part for producing a link information / hypothesis containing a position / location of the face image extracted by the face image extraction part / locate face and the inference information / evaluation information obtained by the inference process / evaluation executed by the inference part, and wherein the link information / hypothesis is stored in selected one of the memory and the storage

medium / computer system RAM together with the image / current frame picked up by the image pickup unit (see paragraph [0048], lines 5-9).

Re Claim 5: Center further discloses wherein the control unit / computer system includes a focal length adjusting part for adjusting the focal length of a lens of the image pickup unit / camera in accordance with the result of extraction by the face image extraction part / locate face (see paragraph [0004], lines 5-8, once the face is extracted and detected and the computer system adjusts the camera to automatically focus based on the detection and evaluation results).

Re Claim 6: Center further discloses comprising a first operating unit / results Pyramid of visual detector for designating a range / location and size of extracting a face image, wherein the face image extraction part / locate face includes a part for limiting the face image extraction area in the image picked up by the image pickup unit / camera in accordance with the designating operation of the first operating unit (see paragraphs [0050] and [0004], with the range specified by the visual detector the camera is adjusted by focusing and zooming to the correct location and size of the face).

Re Claim 7: Center further discloses comprising a first operating unit / color analysis for designating a deletion / remove and substitute of the result / skin probability of extracting a predetermined part / area of skin of the face image extracted, wherein the face image extraction part / locate face includes a part for updating the result of extracting the face image in accordance with the designating operation of the first

operating unit (see paragraphs [0004], [0046], and [0047], an update of the face area parameters of the color analysis is accomplished by the deletion of skin probability in the lookup table followed by the addition or substitution from the user and it is these parameters which update and adjust the brightness, contrast and color balance of the image).

Re Claim 8: Center further discloses comprising a first operating unit for performing an operation of correcting / adjusting the inference information / information or characteristics of a person obtained by the inference process of the inference part / evaluate image quality, wherein the information processing part / processing pass includes a part for correcting the inference information in accordance with the correcting operation of the third operating unit (see paragraphs [0026] and [0020], abstract, the processing passes which are the template matching, motion detection, background differencing, and color analysis adjust the information of the face, paragraphs [0046] and [0047], the color analysis pass looks up and adjusts the skin area table values U and V for proper probability calculations, the U and V values are related to the color information as seen in [0027] lines 17-19).

Re Claim 9: Center further discloses comprising a first operating unit / camera parameter unit for correcting the image pickup conditions / brightness, contrast and color balance adjusted by the image pickup conditions adjusting part / adjust and control the camera, wherein the image pickup conditions adjusting part includes a part for

readjusting the image pickup conditions in accordance with the correcting operation of the first operating unit (see Fig. 1, paragraph [0004], lines 5-13, paragraph [0020]).

Re Claim 10: Center further discloses the information processing part / processing pass includes a part for determining a direction / location of the face of an object in the image based on the result of extraction of the image stored in selected one of the memory and the storage medium by the face image extraction part / locate face, and a part for rotating / tilt movable camera the image in such a manner that the face direction conforms with a predetermined reference direction in the case where the determined face direction is different from the reference direction (see [0024], the wide-angle movable camera may tilt).

Although Center doesn't specifically recite the limitation of determining the direction of the face and conforming the determined direction with the reference direction, it would be obvious to one of ordinary skill in the art at the time the invention was made to include this limitation in the processing pass in order to actually have Center's wide-angle movable camera tilt in the appropriate direction to actually optimize the face location detector (Center, paragraph [0024]).

Re Claim 11: Center further discloses comprising a feature amount / skin color probability storage part for storing the feature amount of the face image already extracted, wherein the face image extraction part includes a specified image extraction part / locate face for extracting an image area including the feature amount of the

specified face image stored in the feature amount storage part from the image picked up by the image pickup unit (see paragraph [0046], lines 22-27, a skin color probability is stored in colorPyramid after the face is extracted from the current incoming image and after it goes through the color analysis processing pass).

Re Claim 12: Center further discloses comprising an object storage part / computer system RAM for storing the feature amount / skin tone color probability of the face image of a specified object / user or users, wherein the information processing part / processing pass compares / evaluates for modification the feature amount / skin tone color probability of the face image extracted by the face image extraction part / locate face with the feature amount / skin color probability stored in the object storage part / computer system RAM, so that in the case where the comparing process shows that the extracted face image is that of the specified object, a link information / hypothesis containing the inference information / information or characteristics of a person obtained by the inference process of the inference part / evaluate image quality and the information / U and V values for identifying the specified object / current face image is produced and stored in selected one of the memory and the storage medium / computer system RAM together with the image picked up / current image by the image pickup unit (see Fig. 1, [0046], lines 22-27, [0047], lines 1-5, [0048], lines 5-9, [0050]).

As to claims 23 and 25, the claims are the corresponding computer-readable medium and method claims to system claim 1 respectively. The discussions are addressed with regard to claim 1.

11. Claims 13-15, 17-22, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Center, in view of Soriano ("Making saturated facial images useful again", a Non-patent literature reference supplied by the Applicant, as applied in previous Office Action) and Kojima.

Re Claim 13: Center discloses an image pickup device / videoconferencing system (see paragraph [0002], [0027], [0018], abstract) comprising an image pickup unit / camera including a lens / lens of a camera and an image sensor / camera sensors such as zoom and focus sensors; a control unit / computer system connected to the camera for processing an image picked up by the image pickup unit and storing processed image in selected one of an internal memory / memory of camera or computer system RAM and a predetermined storage medium (see Fig. 1, paragraphs [0018], [0003], and [0027], the computer is connected to the camera and they interact in real time since this is video conferencing), the control unit comprising a registration part / skin tone color probability lookup table for holding the feature amount / skin tone color probability of a face image of each of a predetermined number of objects / users (see [0047], lines 1-5, a predetermined number of objects are a multiple number of users) and information required for adjusting the optimum image pickup conditions / optimum brightness,

contrast and color balancing in correspondence with identification information / skin tone color unique to the object, a face image extraction part / locate face for extracting a face image contained in the image picked up by the image pickup unit (see Fig. 1 paragraphs [0018] and [0019]); an inference part / evaluate image quality for inferring / evaluating attributes / information or characteristics of a person by comparing the feature amount / color or motion analysis of the face image extracted by the face image extraction part with the information registered in the registration part (see paragraphs [0020], [0025], and [0004]); a parameter selecting part for selecting a set of parameters / skin color tones and templates from a table based on the attributes / information or characteristics or range of appearance of a person inferred by the inference part, wherein the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person {see paragraphs [0028] and [0047], Center teaches (for color analysis) a lookup table which is trained [optimal over the default table] for a particular person [regular user] having the parameters based on attributes of a person [skin color tones for the range of the persons appearance], Center also teaches (for template matching method) selecting the templates [parameters] from a number of templates [table] [optimal because Center tries to achieve the greater detection accuracy] tuned to recognize a particular person using the range of appearance or a particular user [parameters based on attributes of a particular person]]; an image pickup conditions adjusting part / adjust and control the camera for adjusting the image pickup conditions / brightness, contrast and color balance for the image pickup unit based on the selected parameters by the parameter selecting part (see Fig. 1, paragraph [0020], [0028],

[0047]); an information processing part / processing pass for storing in selected one of the memory and the storage medium / computer system RAM the image obtained under the image pickup conditions adjusted by the image pickup conditions adjusting part (see paragraph [0020], [0026], and [0027], the computer stores a current frame and does the evaluation of this information and then uses and produces an adjustment based on the evaluation and stores this adjustment frame).

Although Center is silent in teaching the storing of the selected parameters in the one of an internal memory and a predetermined storage medium, it would have been obvious to one of ordinary skill in the art at the time the invention was made because the selected templates need to be stored in the internal memory in order to be accessed and used later on for Centers face recognition tracking system.

However, Center fails to disclose or fairly suggest specifically that a registration part holds the information required for adjusting the optimum image pickup conditions in correspondence with identification information unique to the object. Also, Center fails to specifically suggest a distance recognition part wherein the face image extraction part is influenced by the result of the recognition of the distance part and wherein the parameter selection is also influenced by the result of the recognition by the distance part.

Soriano discloses information / ideal condition value required for adjusting the optimum image pickup conditions / brightness, contrast, and color balancing (Center discloses these pickup conditions) in correspondence with identification information / skin tone color (Center discloses this information) unique to the object (Soriano, Section

2.2 Color Correction by RGB eigenfaces, Section 3.1 Physics-Based Face Database, abstract, lines 6-8, the pickup conditions are adjusted to the ideal condition values to recover color information in facial images taken under non-ideal conditions).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Center's device using Soriano's teachings by including the information required for adjusting the pickup conditions to Center's registration part in order to recover color information in facial images taken under non-ideal conditions (Soriano, abstract, lines 6-8).

However Center, as modified by Soriano, still fails to specifically suggest a distance recognition part wherein the face image extraction part is influenced by the result of the recognition of the distance part and wherein the parameter selection is also influenced by the result of the recognition by the distance part.

Kojima discloses a distance recognition part / calculate object distance L for recognizing a distance / object distance L between an object / object and the image pickup unit / lens [see Kojima, Figs. 109, 110 and 113, col. 30, lines 37-39], wherein the face image extraction part / detection of human face area includes a part for specifying a size of the face image / detect width and size of a human face to be extracted, based on a result of recognition by the distance recognition part / based on the object distance L [see Kojima, Figs. 109, 110 and 113, col. 30, lines 37-39, col. 42, lines 53-65]; selecting a set of parameters / oblique and non-oblique hatching on range RA and R representing flesh tone from a table / LUT (look-up table) based on the attributes of a person / human face size [calculated from the zoom focal length and distance to object]

inferred and a result of recognition / object distance L by the distance recognition part / calculate object distance L wherein the table / LUT (look-up table) stores / memory (214) a plurality of sets of parameters / oblique and non-oblique hatching on range RA and R representing flesh tone that are respectively optimized [optimal because Kojima is trying to achieve greater face detection accuracy] based on each attribute of a person / human face size (see Kojima, col. 40 at lines 40-46, col. 41 at lines 3-5, col. 42 at line 53 through col. 43 at line 11, col. 44 at line 23 through col. 45 at line 17).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Center's device, as modified by Soriano, using Kojima's teachings by including the distance recognition part to Center's face image extraction part for improving the identification of a human face area (see Kojima, col. 42, lines 50-51).

As to claim 15, the discussions are addressed with respect to claim 3.

As to claim 17, the discussions are addressed with respect to claim 5.

As to claim 18, the discussions are addressed with respect to claim 6.

As to claim 19, the discussions are addressed with respect to claim 7.

As to claim 20, the discussions are addressed with respect to claim 8.

As to claim 21, the discussions are addressed with respect to claim 9.

As to claim 22, the discussions are addressed with respect to claim 10.

As to claims 24 and 26, the claims are the corresponding computer-readable medium and method claims to system claim 13 respectively. The discussions are addressed with regard to claim 13.

Re Claim 14: Center further discloses the control unit / computer system includes a part / automatic gain control (AGC) for receiving the input of the information required (taught by Soriano above) for adjusting the optimum image pickup conditions / optimum brightness, contrast, and color balancing and the identification information / skin tone color of the object in response to an image pickup operation / processing pass of a predetermined object for registration in the registration part / skin tone color probability lookup table, and storing / computer system RAM the input information in the registration part together with the face image of the object (see [0003]-[0004], [0046]-[0048], and [0050]).

Although Center's AGC is part of the camera and not part of the control unit or computer system, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an AGC type component built into a computer and controlled by the computer in order for the color correction or adjustment to meet its highest quality by having the automatic gain control type component be dynamically adjusted by the computers inputs.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Palm et al discloses an interphone with television.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 8:00am-4:00pm and every other Friday 8:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jingge Wu/
Supervisory Patent Examiner, Art Unit 2624
Bernard Krasnic
October 3, 2008